

What is claimed is:

5 1. A method of converting device-dependent image signals into device-independent image signals, comprising the step of:

converting device-dependent image signals into device-independent image signals representing densities with block dyes.

10 2. A method of converting device-dependent image signals into device-independent image signals, comprising the steps of:

15 converting device-dependent image signals supplied from an input device which reads an image subject into device-independent image signals representing densities with block dyes; and

converting said device-independent image signals into device-dependent image signals for an output device.

20 3. A method according to claim 1, wherein said device-dependent image signals comprise R, G, B signals or C, M, Y signals, and said device-independent image signals comprise C, M, Y signals representing densities with block dyes.

25 4. A method of determining primary colors of a color image, comprising the steps of:

setting a color reproduction range of the color image

on an xy chromaticity diagram;

setting three straight lines extending through a chromaticity point corresponding to a standard white illuminant on said xy chromaticity diagram and principal wavelengths relative to primary colors in said color reproduction range;

determining the vertexes of a triangle containing said color reproduction range on said three straight lines; and

determining chromaticity values at the vertexes of said triangle as primary colors.

5. A method according to claim 4, wherein said color image is carried on a color reversal film or a reflective color print.

6. An apparatus for converting device-dependent image signals into device-independent image signals, comprising:

an input converter for converting device-dependent image signals into device-independent image signals representing densities with block dyes.

7. An apparatus for converting device-dependent image signals into device-independent image signals, comprising:

an input converter for converting device-dependent image signals supplied from an input device which reads an image subject into device-independent image signals representing densities with block dyes; and

an output converter for converting said device-

independent image signals into device-dependent image signals for an output device.

5 8. An apparatus according to claim 6, wherein said device-dependent image signals comprise R, G, B signals or C, M, Y signals, and said device-independent image signals comprise C, M, Y signals representing densities with block dyes.

10 9. An apparatus for converting device-dependent image signals into device-independent image signals, comprising:

15 a plurality of one-dimensional conversion tables for processing device-dependent image signals supplied from an input device which reads an image subject, with respective predetermined functions;

a table selector for selecting one of said one-dimensional conversion tables which is optimum for said input device; and

20 an input converter for converting the device-dependent image signals processed by the one-dimensional conversion table which is selected by said table selector, into device-independent image signals representing densities with block dyes.

25 10. An apparatus according to claim 9, wherein said table selector comprises:

means for using block dye densities determined from a

reference color chart as target values;

means for processing, as input values, image signals which are produced by reading said reference color chart with said input device and processed by said one-dimensional conversion tables, according to a predetermined polynomial, thereby to produce calculated values; and

means for selecting one of said one-dimensional conversion tables which outputs said input values corresponding to those of said calculated values which are closest to said target values, as the one-dimensional conversion table which is optimum for said input device.

11. An apparatus according to claim 10, wherein said predetermined polynomial comprises a polynomial based on a regression analysis.